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EXAMINER

POON, K

ART UNIT

PAPER NUMBER

2724

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04/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/033,585

Applicant(s)
Takeyuki Nagashima

Examiner
King Y. Poon

Group Art Unit
2724



☒ Responsive to communication(s) filed on Mar 6, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-15 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-15 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2724

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan et al.

Regarding claims 7, 13: Morgan teaches an image processing apparatus (see # 10 server of fig. 1) connected, via a communication network, (see # 12 of fig. 1) with a host computer (see # 18a, 18b of fig. 1) and a plurality of image output units, (see 16a, 16b of fig. 1) each image output unit having a function of updating condition information of the image output unit, (see column 30 line 47-50, column 9 line 4-7) the apparatus comprising: an input unit for inputting the condition information updated by the plurality of image output units; (50 of fig. 1) a memory (# 48 of fig. 1) for storing the inputted condition information in association with each of the plurality of image output units; a transmitter (see 38 of fig. 1) for transmitting the stored condition information to the host computer in accordance with a request for acquiring the condition information issued by the host computer (see column 9 line 65-68) and a management unit for managing an image output job of the host computer. (# 54 of fig. 1 and column 10 line 41-48)

Art Unit: 2724

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al. in view of Maniwa.

Regarding claim 8: Morgan has disclosed all of the claim limitations as recited in claim 7 except that the apparatus further comprising a second management unit for managing an image output job for an image output unit.

Maniwa teaches to use a file server to manage an image output job for an image output unit. (See # 104 of fig. 1 and fig. 5) Morgan and Maniwa are combinable because they are from the same area of managing print jobs.

At the time of invention, it would have been obvious to one of ordinary skill in the art to use a file server (second management unit) to manage an image output job for an image output unit of Morgan as taught by Maniwa for the purpose of keeping track of the print job for the image output unit. Therefore, it would have been obvious to combine Morgan and Maniwa to obtain the invention as specify in claim 8.

Regarding claim 9: Morgan teaches that each of the pluralities of image output units

Art Unit: 2724

comprises: an engine unit (# 28 of fig. 1) and a condition acquisition unit (# 29 of fig. 1 and column 9 line 4-15) for automatically acquiring the condition information in accordance with a change in status of the engine unit;

Morgan does not teach to use a memory in the image output unit for storing the acquired condition information.

Maniwa teaches to use a memory (see printer MIB of fig. 9) in a printer controller of an image output unit (see # 102 of fig.1) for storing acquired condition information.

At the time of invention, it would have been obvious to one of ordinary skill in the art to use a memory in the image output unit of Morgan as taught by Maniwa for the purpose of storing the acquired condition information. Therefore, it would have been obvious to combine Morgan and Maniwa to obtain the invention as specified in claim 9.

Regarding claim 15: Morgan has disclosed all of the claim limitations as recited in claim 7 except the use of a computer readable storage medium to store the program code for the controlling the apparatus disclosed in claim 7.

Maniwa teaches to use a computer readable storage medium (see software in the digital copier system of column 47-48 and fig.2) to store a program code to control an apparatus.

Morgan and Maniwa are combinable because they are from the same area of using a processor.

At the time of invention, it would have been obvious to one of ordinary skill in the art to provide the image processing apparatus of Morgan disclosed in claim 7 a computer readable storage medium to store the program code for the apparatus as taught by Maniwa, for the purpose

Art Unit: 2724

of controlling the apparatus. Therefore, it would have been obvious to combine Maniwa and Morgan to obtain the invention as specified in claim 15.

5. Claims 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al. in view of Sasanuma et al.

Regarding claim 10: Morgan teaches to use a user interface for controlling the image processing apparatus. (See 22 of fig. 1)

Morgan does not teach to use the user interface for setting whether or not the image processing is done in accordance with the condition information.

Sasanuma teaches that a user can determine whether or not the image processing is done in accordance with condition information. (See column 19 line 4-9) Morgan and Sasanuma are combinable because they are from the same area of printing using an image output unit.

At the time of invention, it would have been obvious to one of ordinary skill in the art to use the user interface of Morgan for setting whether or not the image processing is done in accordance with the condition information as taught by Sasanuma for the purpose of allowing a user to control the image processing in accordance with the condition information. Therefore, it would have been obvious to combine Morgan and Susanuma to obtain the invention as specified in claim 10.

Regarding claim 11: Morgan teaches an image processing method for performing image processing in a network system (see 12 of fig. 1) to which an image output apparatus (printer of fig. 1), a server (# 10 of fig. 1), and a network terminal (18a of fig. 1) are connected, the method

Art Unit: 2724

comprising: in the image output apparatus: a condition measurement function of measuring a condition in accordance with a change in status; (see column 9 line 4-15) and a notification function of notifying the server of a condition measurement result. (see column 9 line 13-15) In the server: a storage function (see 48 of fig. 1) of storing the condition measurement result notified from the image output apparatus in correspondence with a type of the image output apparatus; and a management function of managing an image output job. (See column 10 line 40-50) In the network terminal: an input function of inputting an image output instruction of a user; (see print request of column 6 line 56) and an acquisition function of acquiring the condition measurement result stored in the server in response to the image output instruction. (see column 9 line 65-68, column 10 line 1-5, column 27, line 35-68)

Morgan does not teach that the network terminal (image processor) is having an image processing function of performing image processing using an image processing condition in accordance with the condition measurement result.

Sasanuma teaches to perform image processing in an image processor (see 1200 of fig 1) according to a measured condition of an image processing apparatus. (See 1100 of fig. 1, column 16, line 20-24, column 5 line 15-35) Morgan and Sasanuma are combinable because they are from the same area of image processing.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the network terminal of Morgan by providing the network terminal an image processing function of performing image processing using an image processing condition in accordance with

Art Unit: 2724

the condition measurement result as taught by Sasanuma for the purpose of creating good quality print. Therefore, it would have been obvious to combine Sasanuma and Morgan to obtain the invention as specified in claim 11.

6. Claims 1-6, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maniwa et al. in view of Sasanuma et al and Ferguson.

Regarding claims 1, 12: Maniwa teaches an image processing apparatus (see # 107, 109, 104 of fig. 1) comprising: a communicator for performing two-way communications (see interface A and B of fig. 1) with an image output unit (#105 of fig. 1) that includes an update unit (see # 112 of fig. 1) for updating condition information indicating a condition of the image output unit (see column 6 line 30-40) and a memory for storing the condition information (see MIB of column 23 line 40-45); an input unit (see interface A of fig. 1 and column 7 line 20-38) for inputting an image output instruction; an acquisition unit (see interface B of fig. 1 and fig.) for acquiring the condition information stored in the image output unit by utilizing the two-way communications, and an image processor (see 107 of fig. 1)for performing image processing of image data. (See column 7 line 34-38)

Maniwa does not teach that the acquisition unit acquires the condition information in response to the image output instruction and that the image processing is performed according to the condition information.

Ferguson teaches to acquire condition information in response to image output

Art Unit: 2724

instruction. (See status request on column 1 line 35-43. The status request is an image output instruction because the status request in Ferguson's printer is used to indicate to a printer that an image is to be outputted and have the printer controller to check status before image data is being transferred)

Sasanuma teaches to perform image processing in an image processor (see 1200 of fig 1) according to the condition of an image processing apparatus. (See 1100 of fig. 1, column 16, line 20-24, column 5 line 15-35) Maniwa, Ferguson and Sasanuma are combinable because they are from the same area of image processing.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Maniwa's image processing apparatus by having the acquisition unit to acquire condition information in response to the image output instruction as taught by Ferguson for the purpose of checking the status of the image output unit.

Moreover, it would have been obvious to one of ordinary skill in the art to have the image processor of Maniwa to perform image processing according to the condition of the image processing apparatus as taught by Sasanuma for the purpose of ensuring a good image can be form by the image output unit. Therefore, it would have been obvious to combine Maniwa, Ferguson, and Sasanuma to obtain the invention as specified in claims 1, 12.

Regarding claim 2: Maniwa teaches that the image output unit comprises: an engine unit; (see 110 of fig. 1) a condition acquisition unit (112 of fig. 1) for automatically acquiring the

Art Unit: 2724

condition information in accordance with a change in status of the engine unit. (See column 6 line 390-40)

Maniwa does not teach to use a storage means in the image output unit to store the acquired condition information.

However, Maniwa teaches to use a storage means (printer MIB of fig. 9) to store the acquired condition information in the printer controller.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the image output unit of Maniwa by providing the image output unit a storage means as suggested by Maniwa for the purpose of storing the acquired condition information in the image output unit.

Regarding claim 3: Maniwa does not teach that the condition information is a measurement result of a plurality of patches output by the image output unit.

Sasanuma teaches that the condition information of an image processing apparatus is obtained by a measurement result of a plurality of patches output by an image output unit. (See column 15 line 5-8)

At the time of invention, it would have been obvious to one of ordinary skill in the art to obtain the condition information of the output unit of Maniwa by a measurement result of a plurality of patches output by an image output unit as taught by the Sasanuma for the purpose of creating a good image.

Art Unit: 2724

Regarding claim 4: Maniwa does not teach that image processor converts image data into multi-valued data corresponding to a type of a recording medium used in the image output unit, and performs image processing in accordance with the condition information.

Sasanuma teaches to use an image processor to convert image data into multi-valued data (see “gradation” of column 14 line 15) corresponding to a type of a recording medium (see “paper” of column 14 line 53) used in the image output unit, and performs image processing in accordance with condition information. (See “gradation correction” of column 14 line 26)

At the time of invention, it would have been obvious to one of ordinary skill in the art to use the image processor of Maniwa to convert image data into multi-valued data corresponding to a type of a recording medium used in the image output unit, and to perform image processing in accordance with the condition information as taught by Sasanuma for the purpose of creating a better image.

Regarding claim 5: Maniwa does not teach to use the image processor to quantize the image data which has undergone the image processing in accordance with condition information.

Sasanuma teaches to use an image processor to quantize the image data (see gradation of column 14 line 15) which has undergone the image processing (See “gradation correction” of column 14 line 26) in accordance with condition information.

At the time of invention, it would have been obvious to one of ordinary skill in the art to use the image processor of Maniwa to quantize the image data which has undergone the image

Art Unit: 2724

processing in accordance with the condition information as taught by Sasanuma for the purpose of creating a better image.

Regarding claim 6: Maniwa teaches to use a user interface for controlling the image processing apparatus. (See 103 of fig. 1)

Maniwa does not teach to use the user interface for setting whether or not the image processing is done in accordance with the condition information.

Sasanuma teaches that a user can determine whether or not the image processing is done in accordance with condition information. (See column 19 line 4-9)

At the time of invention, it would have been obvious to one of ordinary skill in the art to use the user interface of Maniwa for setting whether or not the image processing is done in accordance with the condition information as taught by Sasanuma, for the purpose of allowing a user to control the image processing in accordance with the condition information.

Regarding claim 14: Maniwa teaches to use a computer readable storage medium (see software in the digital copier system of column 47-48 and fig.2) to store a program code to control the apparatus of claim 1.

REMARKS

7. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection. Please see office action.

Art Unit: 2724

Action is Final, Necessitated by Amendment

8. Applicant's amendment necessitated the new ground of rejection presented in this office action. Therefore, THIS ACTION IS MADE FINAL. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTHS shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892 or to Supervisor Mr. David Moore whose phone number is (703) 308-7452.



DAVID K. MOORE
SUPERVISORY PATENT EXAMINER
GROUP 2700

April 7, 2000